

**SUPPLEMENTARY MATERIAL 5** Original Exercise Protocol

**Exercise Session Instructions**

**Exercise session outline**

On arrival let participants get changed.

Ask them to put the heart rate monitor on. This will be demonstrated in earlier session see SOP HRM strap.

Follow SOP HRM session to start heart rate recording.

<b>Week</b>	<b>Session number</b>	<b>High Intensity Exercise component</b>	<b>Low Intensity Exercise Component</b>
1	1	<a href="#">10 min warm up</a>  <a href="#">Boxing</a> (4 reps of 45s and 90s rest)  <a href="#">5 min cool down</a>  <b>Total time: 24 min</b>	<a href="#">10 min warm up</a>  <a href="#">Walking football</a> (7.5 min halves) <i>2 min rest at half time</i>  <a href="#">5 min cool down</a>  <b>Total time: 32 min</b>
	2	<a href="#">10 min warm up</a>  <a href="#">Circuit training</a> (4 reps of 45s and 90s rest)  <a href="#">5 min cool down</a>  <b>Total time: 24 min</b>	<a href="#">10 min warm up</a>  <a href="#">Walking netball</a> (7.5 min halves) <i>2 min rest at half time</i>  <a href="#">5 min cool down</a>  <b>Total time: 32 min</b>
2	3	<a href="#">10 min warm up</a>  <a href="#">Football</a> (4 reps of 45s and 90s rest)  <a href="#">5 min cool down</a>  <b>Total time: 24 min</b>	<a href="#">10 min warm up</a>  <a href="#">Walking basketball</a> (7.5 min halves) <i>2 min rest at half time</i>  <a href="#">5 min cool down</a>  <b>Total time: 32 min</b>
	4	<a href="#">10 min warm up</a>  <a href="#">Basketball</a> (4 reps of 45s and 90s rest)  <a href="#">5 min cool down</a>  <b>Total time: 24 min</b>	<a href="#">10 min warm up</a>  <a href="#">Walking dodgeball</a> (7.5 min halves) <i>2 min rest at half time</i>  <a href="#">5 min cool down</a>  <b>Total time: 32 min</b>
3	5	<a href="#">10 min warm up</a>  <a href="#">Choice/combination</a> (5 reps of 45s and 90s rest)	<a href="#">10 min warm up</a>  Walking choice (9 min halves) <i>2 min rest at half time</i>

		<a href="#">5 min cool down</a>	<a href="#">5 min cool down</a>
		<b>Total time: 26 min 15 sec</b>	<b>Total time: 35 min</b>
	6	<a href="#">10 min warm up</a>	<a href="#">10 min warm up</a>
		<a href="#">Boxing</a> (5 reps of 45s and 90s rest)	Walking choice (9 min halves) <i>2 min rest at half time</i>
		<a href="#">5 min cool down</a>	<a href="#">5 min cool down</a>
		<b>Total time: 26 min 15 sec</b>	<b>Total time: 35 min</b>
4	7	<a href="#">10 min warm up</a>	<a href="#">10 min warm up</a>
		<a href="#">Circuit training</a> (5 reps of 45s and 90s rest)	Walking choice (9 min halves) <i>2 min rest at half time</i>
		<a href="#">5 min cool down</a>	<a href="#">5 min cool down</a>
		<b>Total time: 26 min 15 sec</b>	<b>Total time: 35 min</b>
	8	<a href="#">10 min warm up</a>	<a href="#">10 min warm up</a>
		<a href="#">Football</a> (5 reps of 45s and 90s rest)	Walking choice (9 min halves) <i>2 min rest at half time</i>
		<a href="#">5 min cool down</a>	<a href="#">5 min cool down</a>
		<b>Total time: 26 min 15 sec</b>	<b>Total time: 35 min</b>
5	9	<a href="#">10 min warm up</a>	<a href="#">10 min warm up</a>
		<a href="#">Basketball</a> (6 reps of 45s and 90s rest)	Walking choice (10.5 min halves) <i>2 min rest at half time</i>
		<a href="#">5 min cool down</a>	<a href="#">5 min cool down</a>
		<b>Total time: 28 min 30 sec</b>	<b>Total time: 38 min</b>
	10	<a href="#">10 min warm up</a>	<a href="#">10 min warm up</a>
		<a href="#">Choice/combination</a> (6 reps of 45s and 90s rest)	Walking choice (10.5 min halves) <i>2 min rest at half time</i>
		<a href="#">5 min cool down</a>	<a href="#">5 min cool down</a>
		<b>Total time: 28 min 30 sec</b>	<b>Total time: 38 min</b>
6	11	<a href="#">10 min warm up</a>	<a href="#">10 min warm up</a>
		<a href="#">Boxing</a> (6 reps of 45s and 90s rest)	Walking choice (10.5 min halves) <i>2 min rest at half time</i>
		<a href="#">5 min cool down</a>	<a href="#">5 min cool down</a>
		<b>Total time: 28 min 30 sec</b>	<b>Total time: 38 min</b>

	12	<a href="#">10 min warm up</a> <a href="#">Circuit training</a> (6 reps of 45s and 90s rest) <a href="#">5 min cool down</a> <b>Total time: 28 min 30 sec</b>	<a href="#">10 min warm up</a> Walking choice (10.5 min halves) <i>2 min rest at half time</i> <a href="#">5 min cool down</a> <b>Total time: 38 min</b>
7	13	<a href="#">10 min warm up</a> <a href="#">Football</a> (8 reps of 45s and 90s rest) <a href="#">5 min cool down</a> <b>Total time: 33 min</b>	<a href="#">10 min warm up</a> Walking choice (13.5 min halves) <i>2 min rest at half time</i> <a href="#">5 min cool down</a> <b>Total time: 44 min</b>
	14	<a href="#">10 min warm up</a> <a href="#">Basketball</a> (8 reps of 45s and 90s rest) <a href="#">5 min cool down</a> <b>Total time: 33 min</b>	<a href="#">10 min warm up</a> Walking choice (13.5 min halves) <i>2 min rest at half time</i> <a href="#">5 min cool down</a> <b>Total time: 44 min</b>
8	15	<a href="#">10 min warm up</a> <a href="#">Choice/combination</a> (8 reps of 45s and 90s rest) <a href="#">5 min cool down</a> <b>Total time: 33 min</b>	<a href="#">10 min warm up</a> Walking choice (13.5 min halves) <i>2 min rest at half time</i> <a href="#">5 min cool down</a> <b>Total time: 44 min</b>
	16	<a href="#">10 min warm up</a> <a href="#">Boxing</a> (8 reps of 45s and 90s rest) <a href="#">5 min cool down</a> <b>Total time: 33 min</b>	<a href="#">10 min warm up</a> Walking choice (13.5 min halves) <i>2 min rest at half time</i> <a href="#">5 min cool down</a> <b>Total time: 44 min</b>
9	17	<a href="#">10 min warm up</a> <a href="#">Circuit training</a> (10 reps of 45s and 90s rest) <a href="#">5 min cool down</a> <b>Total time: 37 min 30 sec</b>	<a href="#">10 min warm up</a> Walking choice (16.5 min halves) <i>2 min rest at half time</i> <a href="#">5 min cool down</a> <b>Total time: 50 min</b>
	18	<a href="#">10 min warm up</a>	<a href="#">10 min warm up</a>

		<a href="#">Football</a> (10 reps of 45s and 90s rest)  <a href="#">5 min cool down</a>  <b>Total time: 37 min 30 sec</b>	Walking choice (16.5 min halves) <i>2 min rest at half time</i>  <a href="#">5 min cool down</a>  <b>Total time: 50 min</b>
10	19	<a href="#">10 min warm up</a>  <a href="#">Basketball</a> (10 reps of 45s and 90s rest)  <a href="#">5 min cool down</a>  <b>Total time: 37 min 30 sec</b>	<a href="#">10 min warm up</a>  Walking choice (16.5 min halves) <i>2 min rest at half time</i>  <a href="#">5 min cool down</a>  <b>Total time: 50 min</b>
	20	<a href="#">10 min warm up</a>  <a href="#">Choice/combination</a> (10 reps of 45s and 90s rest)  <a href="#">5 min cool down</a>  <b>Total time: 37 min 30 sec</b>	<a href="#">10 min warm up</a>  Walking choice (16.5 min halves) <i>2 min rest at half time</i>  <a href="#">5 min cool down</a>  <b>Total time: 50 min</b>
11	21	<a href="#">10 min warm up</a>  <a href="#">Boxing</a> (12 reps of 45s and 90s rest)  <a href="#">5 min cool down</a>  <b>Total time: 42 min</b>	<a href="#">10 min warm up</a>  Walking choice (2 x 10 min and 2 x 9 min quarters) <i>1 min rest between</i>  <a href="#">5 min cool down</a>  <b>Total time: 57 min</b>
	22	<a href="#">10 min warm up</a>  <a href="#">Circuit training</a> (12 reps of 45s and 90s rest)  <a href="#">5 min cool down</a>  <b>Total time: 42 min</b>	<a href="#">10 min warm up</a>  Walking choice (2 x 10 min and 2 x 9 min quarters) <i>1 min rest between</i>  <a href="#">5 min cool down</a>  <b>Total time: 57 min</b>
12	23	<a href="#">10 min warm up</a>  <a href="#">Football</a> (12 reps of 45s and 90s rest)  <a href="#">5 min cool down</a>  <b>Total time: 42 min</b>	<a href="#">10 min warm up</a>  Walking choice (2 x 10 min and 2 x 9 min quarters) <i>1 min rest between</i>  <a href="#">5 min cool down</a>  <b>Total time: 57 min</b>
	24	<a href="#">10 min warm up</a>	<a href="#">10 min warm up</a>

		<a href="#">Basketball</a> (12 reps of 45s and 90s rest) <a href="#">5 min cool down</a> <b>Total time: 42 min</b>	Walking choice (2 x 10 min and 2 x 9 min quarters) <i>1 min rest between</i>  <a href="#">5 min cool down</a> <b>Total time: 57 min</b>
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### Warm up:

Pulse raiser for 2mins

- Jog around the hall. Introduce exercises such as clap hands and touch floor.

Repeat the following twice:

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<b>Functional warm up</b>	
High knee march	30 secs
Heel Flicks	30 secs
Knees hugs	30 secs
Cross foot touch	30 secs
half squat	30 secs
Shallow lunge	30 secs
Circling arms	30 secs
Cross arm extensions	30 secs

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### High Intensity Interval Training Exercises

Activities listed below can be at the discretion of the REP as long as they are within the intensity and acceptable to participants. These are examples rather than an exhaustive list.

#### Boxing:

Reps can include any of the following:

- Ten jabs\*, followed by running to the end of the sports hall and back
- Ten hooks, followed by five squat thrusts
- Fast upper cuts
- Ten jabs, followed by five-star jumps
- Fast jabs
- Ten side steps, followed by running to the end of the sports hall and back
- Five combination punches (hook and jab), followed by running to the end of the sport hall and back
- Ten of favourite punch action, followed by ten tuck jumps

\*Ensure they do not overextend otherwise there is a greater risk of injury.

#### Circuit training:

Reps can include any of the following:

- Full star jumps

- Tuck jumps
- Stationary high knees runs
- Jumping with one hand in the air
- Hop on one leg
- Sit ups
- High leg kicks
- Fast side to side twists
- Wall climbers

#### Football:

- Ten toe touches, followed by running to a cone and back
- Sprinting around cones in the sports hall
- Kicking a football into a goal then running to end of the sports hall and back.
- Kicking a football into a goal then perform 5 burpees
- Performing fast feet movements through cones then running to end of the sport hall and back
- Running around the sports hall following a square or diagonal course

#### Aerobic Sessions

- Ideas??

#### Basketball:

- Receiving and returning a chest pass, followed by running to a cone and back
- Running around in a square and receiving and returning a bounce pass on once corner of the square
- Bouncing a ball five times then running to the end of the hall and back
- Receiving a shoulder pass, followed by running to a cone and back

#### Choice/Combination:

Let the participants choose from the other options as to what they want to do. Let the group dictate the exercises they want to do to help maintain engagement.

#### Multi sport activities

- Ten pin bowling type activity (max 20 min)
- Polybat
- Rackets – table tennis bats/plastic tennis/ping pong ball/squash ball/tables/table tennis table
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### Walking Football

Ensure the teams are fairly even in ability (to be established through trial and error) and that all players are engaged. Otherwise, swap the teams around to make them more balanced. At half time, rest for 2 minutes and encourage players to have a drink.

Rules can be found [here](#).

### Walking netball

Ensure the teams are fairly even in ability (to be established through trial and error) and that all players are engaged. Otherwise, swap the teams around to make them more balanced. At half time, rest for 2 minutes and encourage players to have a drink.

Rules can be found [here](#).

### Walking basketball

Ensure the teams are fairly even in ability (to be established through trial and error) and that all players are engaged. Otherwise, swap the teams around to make them more balanced. At half time, rest for 2 minutes and encourage players to have a drink.

Rules can be found [here](#).

### Walking dodgeball

Ensure the teams are fairly even in ability (to be established through trial and error) and that all players are engaged. Otherwise, swap the teams around to make them more balanced. At half time, rest for 2 minutes and encourage players to have a drink.

Rules can be found [here](#).

### Cool Down

Start the cool down by getting the participants to walk around the room for 2 minutes.

Then the participants will perform static stretches, with each held for 15-30 seconds. Don't forget to get them to stretch both sides/legs/arms. The list below are examples of stretches and not exhaustive.

For example:

- Side stretches
- Chest stretches
- Calf stretches
- Hamstring stretches

### Walking football rules:

Taken from [walkingfootball.co.uk](http://walkingfootball.co.uk)

The following 20 rules can be applied to both competitive and non-competitive matches. They are current as at 4<sup>th</sup> October 2010.

**GENERAL:**

1. 6 players each per side. 5 outfield players and a goalkeeper.
2. Each game is 40 minutes long. 20 minutes per half.
3. No running or jogging, with or without the ball.

**IN-PLAY:**

4. Low impact tackling only. No sliding tackles.
5. No off sides.
6. The ball must not be kicked or deflected by any outfield player, or throw (by the goalkeeper) above head height. Free kicks are awarded to the opposing team if ball travels above head height.
7. Rebounds off walls for indoor matches. Corners and 'kick ins' for outdoor matches, awarded to the team not touching the ball before it last crossed the barrier.
8. All free kicks are indirect (i.e Players cannot shoot direct at the goal. They must pass instead).
9. Goals can be scored from any outfield position. Goals cannot be scored direct from kick offs, kick ins, drop balls, goalkeeper's kick, save or throw.
10. 3 roll on, roll off substitutes permitted per game. Substitutions can be made when there is a break in play, the ball is dead or the goalkeeper has possession of the ball.
11. Referee operates red, yellow and blue card procedures. Blue card indicates a 2 minute Sin Bin for player.
12. Players sent off can take no further part in match. A substitute may be used to replace player sent off after 5 minutes or first conceded goal, whichever occurs first.

**OUTFIELD PLAYERS:**

13. Players are not allowed in the penalty area (except by momentum and no advantage gained). If player enters in the penalty area deliberately or denies a clear goal scoring opportunity – a penalty is awarded to the attacking team.
14. Opposing players must stand at least 2 meters away from the ball when a corner, free kick or 'kick in' is taken.
15. If free kick is on the penalty area line, the ball must be moved back 2 meters (to allow defenders to position themselves between ball and goal).
16. Outfield players are not allowed to hold onto walls (indoor matches) or barriers (outdoor matches) to block or shield the ball.

### **GOALKEEPER:**

17. Goalkeeper must wear shirt or bib that distinguishes from outfield players.

18. Goalkeeper can receive back passes. He may either kick or throw ball back into play. Goalkeeper throws must be under arm.

19. Possession is given back to the goalkeeper if ball travels above head height whilst being deflected or saved by the goalkeeper.

20. Goalkeeper not allowed outside penalty area (except by momentum whilst making a save). If goalkeeper leaves the penalty area deliberately or denies a clear goal scoring opportunity – a penalty is awarded to the attacking team.

### Walking netball rules:

Taken from [englandnetball.co.uk/my-game/walking-netball/walking-netball-rules/](http://englandnetball.co.uk/my-game/walking-netball/walking-netball-rules/)

To play Walking Netball some rules need to be adapted to ensure that the game is played appropriately. If you're playing a game competitively, these rules become important.

England Netball has recommended the adaptations below. If you're not playing a competitive game it's really important to deliver a fun and flexible session, therefore, how closely you adhere to the rule adaptations is dependent on your group.

One rule, which must be enforced in all Walking Netball sessions is to ensure that everyone is WALKING:

***“A player must have at least part of one foot in contact with the court at all times.”***

During the game, an extra step maybe taken once a player has received the ball, which reduces the impact on landing and improves the momentum of the game.

***“A player may receive the ball with one foot grounded and then take two steps while in possession of the ball before it must be thrown or shoot.”***

An extra second has been allowed to increase the decision making time whilst in possession of the ball, which should encourage improved ball placement.

***‘A player may throw the ball within four (4) seconds of receiving the ball.’***

For further information on the rules of netball, please refer to the International Netball Federation Official Rules of Netball.

### Walking basketball rules:

Same as basketball, just no running!

### Walking dodgeball rules:

Beginning

- 6 players per team start touching the back wall on their side of the court.
- 3 balls in the centre dead zone.
- 3 people walk to the balls and try and bring them back to their wall. Players must not cross the deadzone lines.
- Once a ball touches the back wall it is active.

#### The Games

- Hitting a player with a ball eliminates them from the game. The ball must not touch anything else before it hits the player.
- Catching a throw eliminates the thrower and gets one of your eliminated players back into the game. Does not have to be a clean catch but only the catching player may touch the ball.
- Knocking a ball out of a player's hand with a throw eliminates the player from the game.
- If you are holding a ball you may use the ball to block throws, your hands count as part of the ball while you hold it.
- The team with the most players must make an attack within 5 seconds of gaining possession of the majority of the balls. The referee will call 5 seconds. If the players retain possession of the majority of the balls after the 5 seconds any player on that team carrying a ball is eliminated.